

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

BAE SYSTEMS INFORMATION AND
ELECTRONIC SYSTEMS
INTEGRATION INC.,

Plaintiff,

v.

AEROFLEX INCORPORATED and
AEROFLEX PLAINVIEW, INC.,

Defendants.

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

Civ. No. 09-769-LPS

OPINION

Douglas E. McCann, Linhong Zhang, Wilmington, DE; John M. Skenyon, Jolynn M. Lussier, Thomas A. Brown, Boston, MA, FISH & RICHARDSON, Attorneys for Plaintiff.

Matt Neiderman, Wilmington, DE; L. Norwood Jameson, Matthew C. Gaudet, Atlanta, GA; John M. Baird, Washington, DC, DUANE MORRIS LLP, Attorneys for Defendant.

UNSEALED ON AUGUST 9, 2011

August 2, 2011
Wilmington, DE


Stark, U.S. District Judge:

BAE Systems Information and Electronic Systems Integration, Inc. (“BAE”) sued Aeroflex Incorporated and Aeroflex Plainview, Inc. (collectively, “Aeroflex”) on October 14, 2009. (D.I. 1) In the complaint, BAE alleges, among other things, that Aeroflex infringes U.S. Patent No. 5,742,384 (the “’384 patent”). (*Id.* at 11) Pending before the Court are two motions: BAE’s Motion to Strike Affidavits Supporting Aeroflex’s Motion for Summary Judgment (D.I. 126); and Aeroflex’s Motion for Summary Judgment of non-infringement of the ’384 patent.¹ (D.I. 98) For the reasons that follow, the Court will deny BAE’s motion to strike and grant Aeroflex’s motion for summary judgment.

I. BACKGROUND

BAE is a Delaware corporation with its principal place of business in New Hampshire. BAE operates in the global defense, security, and aerospace industry and develops and supports infrared countermeasure (“IRCM”) defense technologies for use on military and commercial vehicles on both land and air. BAE owns the rights in the ’384 patent.² Aeroflex is a Delaware corporation that manufactures certain components of defense systems and subcontracts with defense contractors, including BAE.

Both BAE and Aeroflex are involved in the production of IRCM systems for U.S. military aircraft. Low-flying military aircraft are susceptible to certain kinds of missiles, known

¹BAE also alleges several state law claims, such as trade secret misappropriation and breach of contract. (D.I. 1 at 12-15) For purposes of the pending motions, however, only the claim for patent infringement is relevant.

²The ’384 patent is entitled, “Compact Scanning Infrared Countermeasure Emitter.” (D.I. 1 Ex. A)

as heat-seeking missiles. (D.I. 99 at 4) In response to these heat-seeking missiles, aircraft are equipped with defensive mechanisms that can defend the aircraft from missile attack. IRCM systems detect energy from incoming missiles and, using infrared technology, are able to throw the missiles off course. Specifically, IRCM systems point a focused beam of infrared energy at the incoming missile to jam the missile's heat-seeking guidance system, and, thereby, prevent the missiles from damaging the aircraft. (D.I. 157 at 2-4)

The IRCM systems that BAE has developed involve the use of, among many other components, a gimbal assembly. A gimbal assembly is a device having one or more axes of rotation that allow an object mounted on the gimbal to move freely in various directions. (D.I. 99 at 5; *see also* D.I. 125 at 2) Aeroflex produces gimbal assemblies for use in IRCM systems.

The dispute between Aeroflex and BAE arises from a series of contracts between them, the earliest of which was executed in 1996.³ (D.I. 179 Ex. 10-12; D.I. 157 Ex. 7-8) In 1996, BAE began development of a first generation advanced direct IRCM system ("DIRCM"). (D.I. 157 at 4) To aid its efforts, BAE subcontracted with Aeroflex to construct a two-axis gimbal assembly that would enable BAE's DIRCM to track and aim at an incoming target, such as a heat-seeking missile. (D.I. 179 Ex. 12) The parties entered into a subsequent agreement in 2002 under which Aeroflex agreed to construct an IRCM gimbal assembly known as Fast Jet. (D.I. 174 at 3-4; D.I. 157 at 12; D.I. 157 Ex. 7)

Pursuant to these agreements, BAE provided certain information to Aeroflex, including drawings, specifications, renderings of designs, and specific components that were necessary for

³Aeroflex performed work on gimbal assemblies for Lockheed Martin beginning in 1996. For purposes relevant to this motion, BAE's predecessor was Lockheed Martin. (D.I. 174 at 2-3; *see also* D.I. 173 at 3)

the design, development, manufacture, assembly, and testing of the gimbal assemblies. Under these subcontracts, as well as various “Proprietary Information Agreements,” Aeroflex agreed to contractual provisions involving the use of BAE’s intellectual property and other sensitive business information. (D.I. 157 Exs. 5-8) In particular, the contracts mandated that Aeroflex would not use or reveal any of BAE’s trade secrets or intellectual property to any third party. (*Id.* Ex. 8 at 3: “BAE SYSTEMS shall be the owner of all inventions, technology, designs . . . technical information . . . and other information conceived, developed or otherwise generated in the performance of this Contract”)

Non-party ITT Corporation (“ITT”) is also a key player in the present disputes. ITT is a direct competitor of BAE and, like BAE, serves as a defense contractor for the U.S. government. (D.I. 101 at 1) In 2003, ITT began working toward developing its own IRCM system; and, in 2005, ITT subcontracted with Aeroflex to develop a gimbal specification to meet ITT’s requirements. (D.I. 102) Subsequently, Aeroflex provided to ITT a gimbal assembly in April 2006, in April 2009, in May 2009, and twice in December 2009.⁴ (D.I. 99 at 5 n.4; D.I. 102) Aeroflex contends it provided these gimbals to ITT with the understanding that they were being used for ITT’s IRCM program for U.S. military aircraft. (D.I. 102 at 2)

On October 14, 2009, BAE filed a six-count complaint against Aeroflex, alleging, among other things, that, as a result of Aeroflex’s work with a third party, Aeroflex induced and contributed to infringement of the ’384 patent, misappropriated trade secrets, and breached contractual obligations owed to BAE. Aeroflex answered and counterclaimed on December 3,

⁴ITT also expects that Aeroflex will provide additional gimbal assemblies to ITT in 2011. (D.I. 101 at 3; D.I. 102)

2009. (D.I. 16) After the parties exchanged their infringement contentions, and BAE revealed that ITT was the third-party that formed the basis of Aeroflex's alleged indirect infringing activities, Aeroflex subsequently raised issues involving the government and 28 U.S.C. § 1498 (2006). Section 1498 operates as an affirmative defense to a claim of patent infringement when the government authorizes and consents to one of its contractors infringing a third party's patent rights. When there has been a proper authorization and consent under § 1498, the patentee's sole recourse is a patent infringement suit against the U.S. government in the United States Court of Federal Claims. To that end, on March 30, 2010, Aeroflex amended its answer to assert § 1498 as an affirmative defense (D.I. 33), and on February 2, 2011, Aeroflex filed the instant motion for summary judgment (D.I. 98).

Because the focus of Aeroflex's motion for summary judgment involves the § 1498 defense and the extent and scope of the government's authorization for Aeroflex's allegedly infringing activities, a timeline of the government's proposals and solicitations is relevant to this motion. The U.S. military publishes "solicitations," in which it requests private contractors to submit, among other things, bids, offers, and various kinds of proposals. In March 2009, the Naval Research Laboratory issued Broad Area Announcement ("BAA") 56-07-06, Area (5) solicitation. (D.I. 128 Ex. 19; D.I. 100 Ex. 1; D.I. 101 at 4)

In this BAA, the government stated that its intent was to "investigate integrating a light weight, low cost, highly reliable laser based jamming countermeasure with a Missile Warning System (MSW) for use on Army, Navy, and Air Force rotary wing aircraft." (D.I. 100 Ex. 1 at 1) The government indicated it would host an industry day in which it would explain the goals of the BAA. Additionally, the government set forth a tentative schedule that contemplated

receiving “white papers” from interested vendors on April 3, 2009 and more formal proposals on April 8, 2009. (*Id.* at 4) Eventually, the vendors who were awarded a contract would be given an eight-month performance period, during which certain testing would occur to evaluate whether the vendor’s IRCM product could meet the government’s specification. (*Id.*)

ITT submitted an initial proposal in response to the government’s BAA. (D.I. 100 Ex. 2) ITT’s proposal was entitled “Integration Demonstration of ITT’s ProtectIR Shield: A Light Weight, Low Cost and Highly Reliable Laser Based Jamming Countermeasure System.” (*Id.*) To be eligible to win a BAA solicitation contract, the government required that each participant have two systems available for testing. (D.I. 100 Ex. 1 at 4) In its proposal, ITT described the precontractual design and development of its gimbal prototype, including testing that took place – which ITT claimed was sponsored by the government – at the government-owned Lakehurst Naval Air Engineering Station in 2007 and 2008. (D.I. 101 at 5) ITT states that U.S. military officials witnessed and participated in these tests and that ITT provided the test results to the government. (D.I. 99 at 7; D.I. 101 at 5)

The government awarded a BAA Contract to ITT on September 11, 2009. (D.I. 100 Ex. 3) The gimbals provided by Aeroflex to ITT were used in the testing and evaluation phase of the BAA. (D.I. 99 at 8; D.I. 101 at 5) The BAA Contract to ITT contained the broadest authorization and consent clause available under the Federal Acquisition Regulations (“FAR”) system. *See* 48 C.F.R. § 52.227-1; *see also* D.I. 100 Ex. 3. On December 16, 2009, the government conducted a technical interchange meeting for purposes of its IRCM procurement process at a military base in Alabama. (D.I. 101 at 6) Following the government’s testing and evaluation, the government provided each BAA vendor, including ITT, with a document that

contained a preliminary assessment of each vendor's IRCM product. (D.I. 100 Ex. 7) In response to the government's evaluation, ITT provided a final report to the government in April 2010. (D.I. 100 Ex. 5) On April 23, 2010, the government issued its draft solicitation to acquire technology development services in furtherance of the laser based CIRCUM program. (D.I. 100 Ex. 6) A synopsis of this proposal stated explicitly that only mature, previously developed CIRCUM systems would be considered. (D.I. 103 Ex. D at 2) On February 16, 2011, the government issued its formal version of the CIRCUM solicitation. This solicitation, like the draft proposal before it, contains the broadest authorization and consent clause available. (D.I. 119 at Ex. A)

Also at issue in this case are attempts by the United Kingdom Ministry of Defense ("MoD") to procure a contract for an IRCM system. (D.I. 125 at 7) The UK MoD issued a document expressing its intent to analyze IRCM equipment for potential use in its fleets. (D.I. 128 Ex. 9 at 1) As part of its initial phase, the MoD requested that interested parties supply at least one gimbal and laser system for loan to the UK for evaluation. (D.I. 125 at 8) ITT submitted a proposal to the UK, but ITT was not selected for further negotiations UK MoD. (D.I. 101 at 8)

II. LEGAL STANDARDS

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party bears the burden of demonstrating the absence of a genuine issue of material fact. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 415 U.S. 574, 586 n.10 (1986). A party asserting that a fact cannot be – or, alternatively, is – genuinely disputed must be

supported either by citing to “particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for the purposes of the motions only), admissions, interrogatory answers, or other materials,” or by “showing that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact.” Fed. R. Civ. P. 56(c)(1)(A) & (B). If the moving party has carried its burden, the nonmovant must then “come forward with specific facts showing that there is a genuine issue for trial.” *Matsushita*, 415 U.S. at 587 (internal quotation marks omitted). The Court will “draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000).

To defeat a motion for summary judgment, the non-moving party must “do more than simply show that there is some metaphysical doubt as to the material facts.” *Matsushita*, 475 U.S. at 586-87; *see also Podohnik v. U.S. Postal Service*, 409 F.3d 584, 594 (3d Cir. 2005) (stating party opposing summary judgment “must present more than just bare assertions, conclusory allegations or suspicions to show the existence of a genuine issue”) (internal quotation marks omitted). However, the “mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment;” a factual dispute is genuine only where “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 411 U.S. 242, 247-48 (1986). “If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted.” *Id.* at 249-50 (internal citations omitted); *see also Celotex Corp. v.*

Catrett, 411 U.S. 317, 322 (1986) (stating entry of summary judgment is mandated “against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial”).

III. DISCUSSION

As the Court indicated at the outset, there are presently two motions pending in this case: (1) BAE’s motion to strike certain affidavits and supporting exhibits that Aeroflex filed in connection with its motion for summary judgment (D.I. 126); and (2) Aeroflex’s motion for summary judgment pursuant to § 1498 (D.I. 98). The Court will first address BAE’s motion to strike and then turn to Aeroflex’s motion for summary judgment.

A. BAE’s Motion to Strike

On February 4, 2011, Aeroflex filed its motion for summary judgment, arguing that § 1498 provides an affirmative defense to BAE’s claims of patent infringement. (D.I. 98) That motion inquires into whether the government has authorized and consented to Aeroflex’s allegedly infringing activities. On March 14, 2011, the same day that BAE filed its answering brief to Aeroflex’s summary judgment motion, BAE filed a motion to strike most of the affidavits Aeroflex had submitted in support of its motion for summary judgment. (D.I. 126) BAE advances two arguments in support of its motion to strike.

1. The Scope of the Court’s Scheduling Order

BAE first contends that the affidavits submitted by Aeroflex are beyond the scope of material the Court allowed in its Scheduling Order. BAE contends that the Court’s Scheduling Order, in granting Aeroflex leave to file an early summary judgment motion based on § 1498, directed that the motion would be “based solely on the evidence identified in Aeroflex’s Status

Letter (plus an authenticating affidavit).” (D.I. 116 at 10; D.I. 93 Ex. B & Ex. C) The only evidence that Aeroflex referenced in its Status Letter, according to BAE, was the BAA Contract and the draft CIRCUM proposal. Thus, all other evidence submitted by Aeroflex in support of summary judgment, including an affidavit from ITT Contracts Manager Kathleen Thornton, should be excluded. In BAE’s view, Ms. Thornton’s affidavit discusses a wide variety of topics that are unrelated to the BAA Contract or draft CIRCUM proposal, such as the history of missile countermeasures and development. (D.I. 127 at 4)

Aeroflex responds that nothing in the Scheduling Order precludes it from submitting additional evidence to provide context and other relevant background information. Some of Aeroflex’s additional evidence, for instance, explains what a “gimbal” is, as background to assist the Court in evaluating the § 1498 defense. Aeroflex contends that while its motion for summary judgment is based primarily on the BAA Contract and CIRCUM proposal, all of the additional evidence it submitted explains how ITT’s conduct was pursuant to the BAA Contract and CIRCUM solicitation, and therefore Aeroflex acted “for the government.” (D.I. 136 at 5-7)

The Court agrees with Aeroflex that the supporting affidavits are not beyond the scope of the Scheduling Order. The information provided by Aeroflex is relevant background. The Court also explicitly allowed for “an authenticating affidavit” to be submitted in connection with Aeroflex’s motion. Accordingly, the Court’s Scheduling Order does not provide a basis to strike the supporting affidavits submitted by Aeroflex.

2. Ms. Thornton’s Affidavit

BAE’s second argument focuses solely on the affidavit submitted by Kathleen Thornton, which BAE contends should be stricken pursuant to Federal Rule of Civil Procedure 56. (D.I.

127 at 6) BAE argues that Ms. Thornton's affidavit should be stricken because she lacks personal knowledge of "vast swaths" of information contained in her affidavit. (D.I. 127 at 6) According to BAE, Ms. Thornton admitted that she has no technical or scientific background in IRCM technology, yet her affidavit contains information regarding this technology. Likewise, BAE argues that Ms. Thornton confirmed that she was not involved in key events in the research and development of ITT's IRCM system. Ms. Thornton's deposition testimony also reveals that she did not have any involvement with ITT's process to subcontract with Aeroflex, and her testimony, according to BAE, is therefore hearsay. (*Id.* at 8) Additionally, according to BAE, it is "far from clear" that Aeroflex would be able to present anyone at trial who could competently testify to these issues. (D.I. 127 at 7)

BAE also contends that ITT has failed to submit crucial documents regarding ITT's submission to the UK, which is another subject of Ms. Thornton's affidavit. BAE argues that it should at least be entitled to view ITT's technical documents so that it can confirm whether Ms. Thornton's representations in her affidavit are accurate. (D.I. 127 at 9)

Aeroflex defends Ms. Thornton's affidavit as being based on personal knowledge about the key facts that are material to Aeroflex's motion for summary judgment. (D.I. 136 at 9) Aeroflex identifies five facts that it contends it must establish to obtain summary judgment, and argues that Ms. Thornton has personal knowledge from firsthand experience to be able to testify competently about each of these five facts. For example, Ms. Thornton knows firsthand that ITT has not made a sale of an IRCM system to the UK or any other non-US governmental entity. (*Id.* at 11) Moreover, at ITT, Ms. Thornton has had primary responsibility for the contracts relevant to the IRCM program since the time of the BAA Contract and CIRCM proposal, so she has

personal knowledge to testify about the requirements under the BAA solicitations and the specifications necessary to meet the BAA Contract, as well as the requirements for gaining access to the Lakehurst military facility for testing. Aeroflex also argues that hearsay testimony is appropriate in a summary judgment affidavit, so long as the party offering such testimony could present the out-of-court declarant at trial for direct examination. Aeroflex submits that either Ms. Thornton or other competent ITT witnesses could testify about the information contained in Ms. Thornton's affidavit. (*Id.* at 12)

Federal Rule of Civil Procedure 56(c)(4) requires that an affidavit must be made on personal knowledge, set out facts that would be admissible in evidence, and show that the affiant is competent to testify about the matters stated in the affidavit. In the context of a motion for summary judgment, hearsay evidence in an affidavit "may be considered if the out-of-court declarant could later present the evidence through direct testimony, i.e. in a form that would be admissible at trial." *Williams v. Borough of West Chester*, 891 F.2d 458, 466 n.12 (3d Cir. 1989) (internal citations and quotation marks omitted); *see also Blackburn v. UPS, Inc.*, 179 F.3d 81, 95 (3d Cir. 1999) (noting that hearsay statement that is not capable of being admitted at trial should not be considered on summary judgment motion); *Philbin v. Trans Union Corp.*, 101 F.3d 957, 961 n.1 (3d Cir. 1996) (same).

Because BAE's objections to Ms. Thornton's affidavit are wide-ranging, it is necessary to analyze each of these objections separately. First, BAE objects that Ms. Thornton does not have sufficient personal knowledge to testify about the ITT IRCM testing as it relates to the government's BAA solicitation process. This objection is without merit. Ms. Thornton's affidavit notes that she has been directly involved in ITT's IRCM contracting activities since

2003.⁵ (D.I. 101 at 2) According to her deposition testimony, Ms. Thornton “supported the IRCM program in helping to establish flight tests at Lakehurst and various other kinds of activities related to – to those flight test activities.” (*Id.* at 29-30) Ms. Thornton further stated that Bill West took over primary responsibility for the IRCM projects for some portion of the relevant time period, but that she has since assumed primary responsibility again. (D.I. 128 Ex. 21 at 66) BAE contends that Ms. Thornton does not have sufficient knowledge of the extent of the government’s participation in some of the testing activities because she was not physically present at the testing. The Court disagrees. Ms. Thornton’s deposition testimony reveals that she possesses firsthand knowledge of the process by which ITT sets up and pays for testing of equipment at a governmental facility. She testified that she made the arrangements for some of these tests. (*Id.* at 88-89) Moreover, to the extent that Ms. Thornton was not involved in the testing during 2008, Ms. Thornton identified another individual at ITT, Mr. West, who would possess such information, and could testify at trial about this subject.

Second, BAE objects to any testimony that Ms. Thornton offered regarding the UK MoD proposal. (D.I. 148 at 4) Specifically, BAE faults Ms. Thornton for not having seen the technical proposal that was submitted by ITT to the MoD. (D.I. 127 at 7) Ms. Thornton’s affidavit, however, does not contain any technical details about ITT’s proposal, beyond stating that it would not have included a laser and would not have included technical details. (D.I. 101 at 8) Ms. Thornton explained that there are legal limits on the technical information a U.S. defense contractor can submit to foreign countries. (D.I. 128 Ex. 21 at 131) Ms. Thornton added

⁵At her deposition, Ms. Thornton corrected the date in the affidavit, which stated that she had been involved with the IRCM since 2000. (D.I. 128 Ex. 21 at 30)

that because of export restrictions, ITT would not have offered to supply a laser to the UK. (*Id.* at 142) BAE's central objection deals not with whether Ms. Thornton possesses sufficient firsthand knowledge, but instead with whether the UK proposal constitutes an offer for sale. BAE's argument as to the legal consequences of the UK proposal, however, does not provide a basis to strike Ms. Thornton's affidavit.

BAE next objects that Ms. Thornton does not possess technical expertise in this area, and therefore cannot testify about key events in the research and development of ITT's IRCM system or the history of missile countermeasures systems. (D.I. 127 at 7) Because the § 1498 defense does not require an analysis of any technical details, however, the Court will not rely on Ms. Thornton's affidavits or testimony in this respect. The inquiry under § 1498 relates to the extent and nature of government involvement, not technical issues of infringement. Ms. Thornton possesses sufficient firsthand knowledge of the extent to which the government participated in ITT's IRCM testing.

BAE's remaining objections are similarly unpersuasive. BAE highlights that Ms. Thornton did not actually attend the technical interchange meeting in Huntsville, Alabama during which governmental subject matter experts went over the logistical specifics of ITT's IRCM system. (D.I. 127 at 7) At her deposition, however, Ms. Thornton provided the names of two ITT individuals who were at that meeting: John Janis and Bob Polazzo. (D.I. 128 Ex. 21 at 78) These two individuals could testify about the Huntsville meeting if needed at trial. Likewise, BAE observes that Ms. Thornton does not know where the Aeroflex gimbals are located physically, but this point is entirely irrelevant to the Court's analysis of whether Aeroflex's conduct is shielded by § 1498.

In sum, neither of BAE's arguments – that the evidence submitted by Aeroflex is beyond the scope of the Court's Scheduling Order or that Ms. Thornton's affidavit is not based on personal knowledge – is availing. Accordingly, the Court will deny BAE's motion to strike the affidavits relied upon by Aeroflex in support of its motion for summary judgment.⁶

B. Section 1498

The sole argument advanced by Aeroflex in its motion for summary judgment is that all of its allegedly infringing activities are protected under 28 U.S.C. § 1498 (2006). (D.I. 99) Aeroflex contends that there are no genuine disputes of material fact that all of its (and by implication ITT's) conduct involving the accused gimbal assembly was undertaken under the aegis of government sponsorship. BAE rejects this argument, contending instead that only a sliver of Aeroflex's conduct is protected under § 1498. (D.I. 125 at 5 n. 5) BAE contends that the majority of Aeroflex's conduct was not done under any government sponsorship whatsoever.

Section 1498, in pertinent part, provides:

(a) Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture. . . .

For the purposes of this section, the use or manufacture of an invention described in and covered by a patent of the United States by a

⁶It is unnecessary to reach Aeroflex's additional argument that, after a change to Federal Rule of Civil Procedure 56 in 2010, motions to strike in connection with motions for summary judgment are now procedurally improper. (D.I. 136 at 15)

contractor, a subcontractor, or any person, firm, or corporation for the Government and with the authorization or consent of the Government, shall be construed as use or manufacture for the United States. . . .

Section 1498 is an affirmative defense. *See Toxgon Corp. v. BNFL, Inc.*, 312 F.3d 1379, 1381 (Fed. Cir. 2002) (“In other words, section 1498(a) is an affirmative defense rather than a jurisdictional bar.”). Because § 1498 makes the sole recourse available to a patent owner a suit against the government, § 1498 “functions not only as a waiver of sovereign immunity but also as consent to liability.” *Madey v. Duke Univ.*, 307 F.3d 1351, 1359 (Fed. Cir. 2002). The statute has the effect of removing the threat of injunction, although it provides for reasonable and entire compensation for infringing use. *See Advanced Software Design Corp. v. FRB of St. Louis*, 583 F.3d 1371, 1375 (Fed. Cir. 2009) (internal citations omitted). Importantly, the Federal Circuit has observed that, “[t]he coverage of § 1498 should be broad so as not to limit the Government’s freedom in procurement by considerations of private patent infringement.” *Id.* at 1376; *see also TVI Energy Corp. v. United States*, 806 F.2d 1057, 1060 (Fed. Cir. 1986).

In order for Aeroflex to prevail on its § 1498 affirmative defense, both parties agree that Aeroflex’s conduct must satisfy two criteria: (1) the use is “for the Government”; and (2) the use is “with the authorization and consent of the Government.”⁷ *Sevenson Env’tl. Servs. v. Shaw Env’tl., Inc.*, 477 F.3d 1361, 1365 (Fed. Cir. 2007); *see also Hughes Aircraft Co. v. United*

⁷The parties are also in agreement that Aeroflex, as a subcontractor, may invoke § 1498 as a defense. *See Hutchinson Indus. v. Accuride Corp.*, 2010 U.S. Dist. LEXIS 30527 (D.N.J. Mar. 30, 2010) (“To begin, the Court notes that the protections of § 1498(a) extend to both contractors and subcontractors.”); *see also W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 842 F.2d 1275, 1283 (Fed. Cir. 1988) (holding that, when applicable, the plain language of § 1498(a) shields contractors, subcontractors, and sub-subcontractors from liability).

States, 209 Ct. Cl. 446, 534 F.2d 889, 897-98 (Ct. Cl. 1976). The Court will address both prongs of the analysis in turn.

A. Use “For the Government”

Aeroflex must first demonstrate that there are no material factual disputes that its allegedly infringing activities are “for the government.” A use is for the government if it is “in furtherance and fulfillment of a stated Government policy” that serves the government’s interests and that is “for the Government’s benefit.” *Madey v. Duke Univ.*, 413 F.Supp.2d 601, 607 (M.D.N.C. 2006); *see also Riles v. Amerada Hess Corp.*, 999 F.Supp. 938, 940 (S.D. Tex. 1998). The parties dispute the meaning and scope of the statutory phrase “for the government.” BAE bases its argument that Aeroflex’s conduct is not for the government on two sets of activity. First, BAE argues that the testing and flight trials that ITT conducted in 2007 and 2008 using the Aeroflex gimbals were not for the government, within the meaning of the statute. (Tr. at 85) Second, BAE contends that an alleged offer for sale of an IRCM system to the UK MoD cannot come within the protections of § 1498. (*Id.*)

Aeroflex responds that the accused activity, including ITT’s research, development, and testing of the gimbal mechanism dating back to 2007, was all “for the government.” (D.I. 99 at 14) In support of its contention, Aeroflex offers the affidavit of Ms. Thornton, the ITT representative, who declared that, “In 2003, ITT decided to develop an IRCM system *for the United States military services.*” (D.I. 101 at 3) (emphasis added) Aeroflex also points out that Congress has enacted a specific policy to encourage contractors, such as ITT, to engage in independent research and development to further national security. *See* 10 U.S.C. § 2372(g); *see also* DoD Directive 3204.1; D.I. 99 at 14. Aeroflex thus contends that, from its inception, the

ITT program's objective was to offer a lower cost, more reliable countermeasure system to the U.S. military, rendering all of the research and development activities relating to the gimbal prototypes "for the government." (*Id.* at 14) Aeroflex emphasizes that it has provided no gimbal assemblies to anyone other than to ITT, and that ITT has not sold its IRCM system to any non-US government entity.

BAE counters that, in order to be "for the government," Aeroflex's activity must be undertaken pursuant to a government contract or solely in response to a bidding process that is ongoing at the time of the allegedly infringing activity. Thus, according to BAE, none of Aeroflex's infringing activity that occurred between 2007 and 2009 – when the government made its BAA solicitation public – can fairly be characterized as "for the government." (D.I. 125 at 14) Additionally, BAE points out that ITT, in its own internal papers, has signaled its intention of "going international" with its IRCM technology, undermining ITT's representations that its conduct has been exclusively for the government. (D.I. 125 at 16; D.I. 128 Ex. 10)

For the proposition that Aeroflex must establish that its activities were undertaken pursuant to a contract, BAE relies heavily on statements in the Federal Circuit's decision in *Sevenson*, 477 F.3d at 1365. In *Sevenson*, the plaintiff's argument was that § 1498 requires that the "primary purpose" of a government contract be for the government. *Id.* While the Federal Circuit rejected this "primary purpose" requirement, it stated that "in context, the 'for the Government' prong of the definition appears to impose only a requirement that the use or manufacture of a patented method or apparatus occur ***pursuant to a contract with the government and for the benefit of the government.***" *Id.* (emphasis added). From this statement, BAE concludes that the for the government prong turns on the existence of a contract.

The Court does not read *Sevenson* to impose a requirement under § 1498 that all accused activity must be subject to an existing contract. As Aeroflex points out, the statement upon which BAE relies is dicta, since the issue before the Federal Circuit in *Sevenson* involved the primary purpose of the contract. (D.I. 135 at 10) It was undisputed that there *was* a contract there. *Sevenson* also stated that the “for the government” inquiry has often collapsed into the “very simple question” of whether the government has “authorized and consented to the . . . infringement.” 477 F.3d at 1366. *Sevenson* further observed that when the “government sought and received hazardous waste remediation services,” those remediation services were obviously for the benefit of the government.

The Federal Circuit’s opinion in *Advanced Software* further makes it clear that no contract is required in order for an accused infringer’s conduct to come within the scope of § 1498. *See Advanced Software*, 583 F.3d at 1376. In *Advanced Software*, the plaintiff sued Fiserv, a private company, as well as certain Federal Reserve Banks. The defendants argued that the government had authorized and consented to their infringing activity, and the district court agreed. *Id.* at 1374. On appeal, the plaintiff emphasized the federal government’s “absence as a party to any contract.” *Id.* at 1375. The Federal Circuit expressly rejected the suggestion that a government contract was required, holding that, “[t]he district court correctly ruled that § 1498(a) does not require that the government be party to any contract, but may apply to activities by ‘any person, firm, or corporation’ for the benefit of the government.”⁸ *Id.* at 1378; *see also Hughes*

⁸As BAE points out, the decision in *Advanced Software* was also animated by other factors – most importantly the government’s repeated efforts to intervene in the litigation to express its authorization and consent – which are not present here. *See* 583 F.3d at 1378-79. Nevertheless, in *Advanced Software*, the Federal Circuit does also explicitly state that § 1498 did not require the government to be a party to a contract.

Aircraft, 534 F.2d at 901 (“Nor . . . is there any requirement that authorization or consent necessarily appear on the face of a particular contract.”). BAE’s emphasis on the existence of a government contract is, therefore, misplaced. Here, the government sought proposals from potential contractors to supply IRCM systems to aid in the government’s military efforts. ITT’s efforts undertaken to supply the government with an IRCM system, even without a contract, were for the benefit of the government.

Nor does the Court agree with BAE that § 1498 only applies to activity conducted after an active bidding process has been initiated by the government. (D.I. 125 at 14) In BAE’s view, since the government did not request ITT to undertake any development of an IRCM system, Aeroflex’s conduct cannot as a matter of law be “for the government.” (D.I. 125 at 7) As one district court has persuasively noted, however, “[r]equiring a government contractor to receive a purchase order with the necessary authorization and consent clauses before even beginning the initial design and development work would impair the efficiency and quality of the current contracting system.” *Astaris, LLC v. Fire-Trol Holdings, LLC*, 2006 U.S. Dist. LEXIS 384 (D. Ariz. Jan. 5, 2006); *see also Raymond Engineering, Inc. v. Miltope Corp.*, 1986 U.S. Dist. LEXIS 25135 (S.D.N.Y. May 23, 1986) (“The central question is whether Miltope’s *extra-contractual* activities deprive it of the ability to invoke section 1498.”) (emphasis added). As the Federal Circuit has also explained, “Section 1498(a) would be emasculated if a patent holder could enjoin bidding to supply infringing products.” *Trojan, Inc. v. Shat-R-Shield, Inc.*, 885 F.2d 854, 856 (Fed. Cir. 1989).

Hence, the critical inquiry is whether Aeroflex’s activity in the period between 2007 and 2009 was conducted for the benefit of the government. There is no material dispute as to what

this conduct entailed,⁹ and the Court concludes there is no requirement that conduct be undertaken pursuant to an existing contract or an ongoing bidding process. To hold to the contrary would undermine the government's procurement efforts. Indeed, encouraging research and development to be used in government military operations was the most basic purpose of § 1498: "The original purpose of § 1498 was 'to stimulate contractors to furnish what was needed for the [First World] War, without fear of becoming liable themselves for infringements to inventors or the owners or assignees of patents.'" *Madey v. Duke Univ.*, 413 F. Supp. 2d 601, 606 (M.D.N.C. 2006) (internal citations omitted).

At bottom, BAE's basic argument turns on whether § 1498 shields activity undertaken before a contract and before an active bidding process has been initiated by the government. BAE cited no authority, apart from *Sevenson* (which the Court has already addressed), for the proposition that pre-bidding, pre-contractual activity is not protected under § 1498. Indeed, the weight of authority suggests the opposite. Courts consistently construe the protections afforded by § 1498 broadly in the bidding context. *See Hutchinson Indus. v. Accuride Corp.*, 2010 U.S. Dist. LEXIS 30527 (D.N.J. Mar. 30, 2010) (discussing pre-contractual infringement); *Raymond Engineering*, 1986 U.S. Dist. LEXIS 25135. As the court noted in *Astaris*, "[v]iewed in light of

⁹There is not sufficient evidence from which a reasonable factfinder could conclude that ITT has used the gimbal assemblies provided by Aeroflex in connection with any infringing activity outside of ITT's program, which is directly targeted to receiving U.S. government contracts. Indeed, the document upon which BAE relies for its infringement contentions states on its first page that the ITT system has been through a series of "three separate flight tests sponsored by the US Army" and that ITT's "system provides a modular, scalable open architecture solution to meet the current need of Army and Navy rotorcraft." (D.I. 103 Ex. C) Additionally, as Ms. Thornton testified in her sworn deposition testimony, "ITT decided to develop an IRCM system for the United States military services. The ITT program objective was to offer a lower cost, more reliable product to the United States military services." (D.I. 101 at 3)

the purpose underlying § 1498 to allow the government to procure materials needed to operate without the fear of patent infringement claims, a *potential* government contractor such as Fire-Trol is properly protected under § 1498 from liability for patent infringement *even during the time it develops and manufactures* a small quantity of infringing product for testing when the product is later subject to bidding to supply the United States with the product.” *Astaris*, 2006 U.S. Dist. LEXIS 384, at *21-22 (emphasis added); *see also Hutchinson*, 2010 U.S. Dist. LEXIS 30527, at *42-43 (agreeing with *Astaris* that § 1498 coverage extends to pre-contractual infringing activity). What is more, it is undisputed that, at this point, ITT *is involved* in an active bidding process and *has* entered into a contract with the government. BAE effectively concedes that Aeroflex’s activities conducted pursuant to the March 2009 BAA solicitation and subsequent April 2009 BAA Contract between ITT and the government are within the purview of § 1498. (D.I. 125 at 5 n.5)

The same logic applies with equal force to pre-bidding activity, particularly when, as here, the product is later subject to government bidding. The government clearly has a national interest in achieving the best, most advanced form of IRCM technology; moreover, having defense contractors compete for bids enables the government to procure the best defense systems at a lower price. The government’s testing and evaluation of the ITT IRCM system have also conferred a benefit on the government by providing the government with a fuller understanding of the current technologies in this area.

BAE also contends that ITT’s submission to the UK MoD demonstrates that ITT’s research and development of accused products was not “for the benefit of the government.” The Court is not persuaded. *Hutchinson* explicitly rejected the theory that a single commercial quote

to a potentially interested buyer of the accused products would overcome the protections of § 1498. *See Hutchinson*, 2010 U.S. Dist. LEXIS 30527, at *16. Where no sales have occurred, speculation about future non-U.S. government sales are just that: speculation.¹⁰ *See also Ling-Temco-Vought, Inc. v. Kollsman Instrument Corp.*, 372 F.2d 263, 269 (2d Cir. N.Y. 1967) (upholding § 1498 defense when no actual sales occurred, rejecting argument that “wide-range of non-governmental uses . . . for which the instrument . . . might allegedly be adapted” rendered § 1498 unavailable).

In *Astaris*, 2006 U.S. Dist. LEXIS, 384, the Court likewise rejected a theory that a potential future sale renders a § 1498 defense non-meritorious. The plaintiff in *Astaris* argued that because the defendant had sold similar products to various states in the past, the defendant could – or was likely to – sell infringing product to those states in the future, and such future sales would not be “entirely by and for the benefit of the United States.” *Id.* at *30. In rejecting this argument, the *Astaris* court noted that “[m]ere allegation and speculation do not create a factual dispute for purposes of summary judgment.” *Id.* (internal quotations and citations omitted).

It also bears emphasis that “[i]t is not necessary [for the government] to be the sole beneficiary . . . in order to be a beneficiary for the purposes of § 1498(a).” *Advanced Software*, 583 F.3d at 1378; *see also Severson*, 477 F.3d at 1365-66 (rejecting notion that § 1498(a) only operates if “primary purpose” of contract is to benefit government). ITT’s proposal to the UK

¹⁰BAE argues that the UK bid constitutes an infringing “offer for sale.” (Tr. at 101) The Court has been given little in the briefing on this theory of infringement, and the record evidence with respect to such “offer” is that the proposal ITT provided to the UK did not contain a laser or any technical information. (D.I. 101 at 8; *see also* Tr. at 131) Hence, the record does not show a genuine dispute of material fact with respect to this “offer.”

was rejected very soon after it was submitted, there is no record evidence that ITT actually submitted a prototype for testing, and no sale actually occurred. (D.I. 101 at 8) There is no evidence that ITT has made any other non-U.S governmental bids or proposals. (*Id.*) Indeterminate speculation and even unrealized ambitions to sell into an international market are not, on the present record, sufficient to defeat the § 1498 defense.

Thus, the Court is satisfied that none of BAE's arguments justify finding that ITT's development and testing of the gimbal assembly was not "for the government." Accordingly, Aeroflex has satisfied the first prong of the § 1498 test.

B. Use "With the Authorization and Consent of the Government"

In order to demonstrate that summary judgment is appropriate, Aeroflex must also establish that there is no material factual dispute that its use of the gimbal assembly was with "the authorization and consent of the government." *See Severson*, 477 F.3d at 1365. The government's authorization and consent may be either express or implied. *See Madey*, 413 F.Supp.2d at 607 ("A use is with the 'authorization and consent of the Government' where the Government either expressly or impliedly consents to the infringement.") (internal citations omitted); *see also Parker Beach Restoration, Inc. v. United States*, 58 Fed. Cl. 126, 132 (2003) (same). The government sometimes includes a broad authorization and consent in its solicitation. *See Hutchinson*, 2010 U.S. Dist. LEXIS 30527, at *18. Authorization and consent clauses also appear in government contracts.

Aeroflex contends (and BAE does not dispute) that the BAA Contract at issue here contains the broadest authorization and consent clause available in government procurement. *See* 48 C.F.R. § 52.227-1(Alternate I) ("The Government authorizes and consents to all use and

manufacture of any invention described in and covered by a United States patent in the performance of this contract or any subcontract at any tier.”); D.I. 100 Ex. 3 at 15; Tr. at 89. Similarly, the draft CIRCUM solicitation issued in 2010 and the formal version of the CIRCUM solicitation issued in February 2011 both incorporate the same FAR regulation. (D.I. 100 Ex. 6 at 19; D.I. 118) In Aeroflex’s view, these provisions end the matter, for the government cannot be any clearer in its authorization and consent. These provisions, Aeroflex continues, apply back to the initial design, development, and testing of the accused IRCM systems. (D.I. 99 at 15-16) As it did in connection with the “for the government” prong, Aeroflex again argues that the government’s procurement process would be severely undermined if potential government suppliers were precluded from developing, preparing, and testing products in advance of a government solicitation due to the threat of patent infringement lawsuits. (D.I. 99 at 17) As an alternative argument, Aeroflex contends that the government has impliedly consented to ITT’s use of the accused products by cooperating with Aeroflex in its continued testing and evaluation of ITT IRCM systems under the BAA Contract, as well as by participating in the testing of an accused system at Lakehurst during 2007 and 2008, at a time before the government awarded ITT the BAA Contract. (*Id.* at 19-20)

BAE contends, by contrast, that the express authorization under the BAA Contract only applies for the few-month period of the BAA Contract; similarly, the authorization and consent under the CIRCUM solicitation in 2011 only applies for the performance period of the CIRCUM solicitation. (D.I. 125 at 19) In BAE’s view, the government has not expressly consented to ITT’s use of the accused products, even during the tests at Lakehurst. BAE further contends that Aeroflex cannot establish the government’s implied consent. For instance, the government’s

continued evaluation of the ITT IRCM system and the test flights at the Lakehurst facility using military personnel do not evidence, in BAE's estimation, that the government authorizes and consents to ITT's use of patented technology. (*Id.* at 24) BAE notes that while the proposed CIRCUM solicitation in 2011 contains an authorization and consent clause, it is equally important that the initial BAA solicitation did **not** contain such a clause. (*Id.* at 22)

The Federal Circuit stated in *Advanced Software* that "with the authorization and consent" of the government does not require "explicit, written authorization," nor must the authorization be pursuant to a contract with the government. *See* 583 F.3d at 1376. Here, of course, there was a contract between the government and ITT. (D.I. 100 Ex. 3) BAE concedes that the BAA Contract between ITT and the government contains the FAR authorization and consent clause. (D.I. 135 at 5; Tr. at 89) Similarly, the formal CIRCUM solicitation issued on February 16, 2011, also incorporates the same FAR authorization and consent clause. (D.I. 119 Ex. A at 21-24; *see also* D.I. 118 at 2) BAE does not seriously dispute that the BAA Contract contained the broadest available authorization and consent clause. (D.I. 125 at 19; *see also generally Madey*, 413 F.Supp. at 608 ("The federal procurement regulations recognize the varying types of consent that may be included in certain Government contracts."))

The question then is the same question that the Court already addressed in the context of the "for the government" inquiry: do the clauses in the BAA Contract and the CIRCUM solicitation "extend back" to the initial design and development of the technology that everyone acknowledges is currently involved in an active bidding process? BAE argues that the consent clause only applies for a very limited performance period under the BAA Contract and for the performance period of the CIRCUM solicitation. Aeroflex, obviously, disagrees.

Again, the Court concludes that § 1498 extends to pre-contractual activity. The parties' competing arguments about the "authorization and consent of the government" inquiry turn, to a large extent, on the applicability of two cases: *Astaris*, 2006 U.S. Dist. LEXIS 384, and *TVI Energy Corp.*, 806 F.2d at 1057.

In attempting to distinguish these cases, BAE's basic argument is that in both *Astaris* and *TVI*, the defendants were **required** to engage in infringing conduct in order to satisfy the requirements of the government's solicitation. (D.I. 125 at 20) Here, by contrast, BAE argues that the government's solicitation did not **require** any testing. (Tr. at 95) BAE adds that "ITT's self-initiated and funded development and testing of its IRCM system is a completely disconnected event from the later issuing solicitations." (*Id.*)

Certainly, both *TVI* and *Astaris* were influenced by the fact that the government's procurement processes involved in those cases included an explicit requirement of government testing of the accused products. *See TVI*, 806 F.2d at 1060; *Astaris*, 2006 U.S. Dist. LEXIS 384, at *17. Nevertheless, BAE's arguments miss the mark. The March 2009 BAA solicitation and the CIRCM solicitation **also** require, at least implicitly, that the proposed IRCM systems undergo testing in order to be eligible to continue in the procurement process. The BAA solicitation requires submission of "[p]revious measured, recorded and Government validated data collected within the last 12 months supporting any of the outlined tasks." (D.I. 100 Ex. 1 at 4) Moreover, part of the evaluation criteria involved the vendor's ability to provide at least two IRCM systems. (*Id.*) The required data, and the prototype systems, would not exist absent prior testing. The draft and final CIRCM solicitations also require "mature, previously developed" systems and expressly state that the government will not support technologies that "have not already been

demonstrated in a relevant environment.” (D.I. 103 Ex. D) Obviously, again, these requirements cannot be satisfied without prior testing.

Additionally, the plaintiff in *Astaris*, like BAE here, argued that “[a] potential government contractor cannot excuse its patent infringement on the ground that the U. S. Government might, at some unknown future date, decide to buy a product which resulted from the infringement.” *Astaris*, 2006 U.S. Dist. LEXIS 384, at *19. Recognizing that this argument is “facially reasonable,” the court in *Astaris* nevertheless rejected it. *Astaris* held that the defendant was “properly protected under § 1498 from liability for patent infringement even during the time it develop[ed] and manufacture[ed] a small quantity of infringing product for testing when the product [was] later subject to bidding to supply the United States with the product.” *Id.* at 21. *Astaris* reasoned that “a contractor’s immunity under § 1498 generally begins before § 1498 relief against the government becomes available.” *Id.* Nothing in *TVI* contravenes *Astaris* on this point.¹¹

The parties also dispute whether the government has impliedly authorized and consented to ITT’s use of the accused products. Given the Court’s conclusion with respect to express authorization and consent, however, the Court need not resolve this additional dispute.

In sum, the Court finds that there is no material factual dispute that the BAA Contract between ITT and the government contains an express consent and authorization. Accordingly,

¹¹The Court recognizes *TVI*’s statement that, “The significant point is that Blane was *required* to demonstrate the allegedly infringing targets as part of the Government’s bidding procedure. Appellees’ only purpose in demonstrating the targets was to comply with the Government’s bidding procedure.” 806 F.2d at 1060. The Court rejects BAE’s suggestion that this statement means the government’s authorization and consent exists only when a defendant’s conduct has the sole purpose of complying with bid procedures.

all of the activities undertaken pursuant to the BAA solicitation in March 2009 and thereafter are within the scope of § 1498. Likewise, the Court also finds that these protections extend back to the initial allegedly infringing activities, which included testing the gimbal assemblies on government property in 2007 and 2008. ITT's activities resulted in being awarded a BAA Contract, and "[w]hen the Government chooses to provide such express authorization and consent as part of a Government program or contract, a contractor or sub-contractor is entitled to rely on that authorization, and is entitled to the affirmative defense provided by § 1498 for uses of patented inventions within the scope of the consent." *Madey*, 413 F. Supp. 2d at 609. Accordingly, Aeroflex has shown that it satisfies the second prong of the § 1498 test.

IV. CONCLUSION

For the foregoing reasons, the Court will GRANT Aeroflex's motion for summary judgment. An order consistent with this Opinion follows.